

Appln. No. 09/993,067
Amendment dated June 21, 2005
Reply to Office action of March 23, 2004

Attorney Docket No.: TS00-251
Atty Ref.: N1280-01080

REMARKS

Claims 1 - 12 and 14 - 21 are pending in the application. Each of previously pending claims 1 - 12 and 14 - 20 has been rejected. Claim 21 is newly added. Claims 1, 8 and 12 are amended presently. Applicants respectfully request allowance of each of pending claims 1-12 and 14-21.

I. Claim Rejections Under 35 U.S.C. § 103

In paragraph 6 of the Office Action, Claims 1-12 and 14-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kennedy, USPN 6,031,547 in view of Hsiung, et al., USPN 6,865,509, hereinafter "Hsiung". Applicants respectfully submit that these claim rejections are overcome for reasons set forth below.

Claims 1, 8 and 12 are the independent claims of the pending claim set. Each of the independent claims recite features directed related to a graphical display device that has a stage axis, above which one variable is represented and below which two processing related variables are represented. At each stage of the stage axis, three variables are therefore represented. The graphical display of the claimed invention displays several stages along the stage axis, therefore displaying three variables at each of multiple stages of an operation, for example. Each of independent claim 1, 8 and 12 has been amended for editorial purposes to more clearly point out features of the invention.

Amended independent claim 1 recites the feature of:

displaying a first variable variance bar above a stage axis;

displaying a second variable value bar below said stage axis; and

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displaying a second variable variance bar below said second variable bar.

Similarly, amended independent claim 8 recites the features of:

displaying a work-in-progress variance bar above a stage axis on a graphical display device;

displaying a production moves value bar below said stage axis; and

displaying a production moves variance bar below said production moves value bar on said graphical display device.

Amended independent claim 12 similarly recites the features of:

wherein said first variable variance bar is above a stage axis;

said second variable value bar is below said stage axis; and

said second variable variance bar is below said second variable value bar.

Furthermore the claimed invention is characterized in that the target values for the variables having their values displayed – the first and second variables, or the work-in-progress and production moves, are NOT displayed.

Amended independent claim 1 recites the feature of:

wherein said first target value and said second target value are not graphically shown on said graphical display device.

Similarly, amended independent claim 8 recites the features of:

wherein said work-in-progress target value and said production moves target value are not graphically shown on said graphical display.

Amended independent claim 12 similarly recites the features of:

wherein said first target value and said second target value are not graphically shown on said graphical display means.

Each of independent claims 1, 8 and 12 provide a graphical display means with a stage axis. At each stage along the stage axis, a first variable extends above the stage

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axis. Also at each stage, two variables, typically a second variable value and a second variable variance, extend below the stage axis to a depth proportional to their respective magnitudes. In this manner, three separate variables may be represented in a compact form at a single stage location. Each stage location on the stage axis corresponds to a different key stage of the production process. The claimed invention therefore simultaneously displays the values of three variables at several key stages of the production process on a graphical display. The stage axis is clearly the origin point of the graphical display since two of the displayed variables originate here and extend in opposite directions and the third variable extends from the extremity of one of the other variables. The first and second variable target values are not displayed.

Kennedy does not provide an axis that includes both a graphical representation of a variable extending below the axis and a graphical representation of a variable extending above the axis, much less one variable above the axis and two variables below the axis as in the claimed invention. In figure 4 of Kennedy, it can be seen that the "origin" of the bar graphs are at the bottom of the graphical display: "The blocks 140, 142, 144 and 146 are located at the "origin" of the bar graphs", Kennedy, col. 5, lines 42-43. Moreover, the Examiner acknowledges that baseline 210 is a target value, not an axis. All of the graphical representations of Kennedy extend upward from the origin at the bottom of the figures of the graphical display. Kennedy therefore cannot and does not disclose displaying any variable, much less two variables, below a stage axis.

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In particular, Applicants respectfully disagree with the Examiner's citation of column 6, lines 50-59 of Kennedy to support the Examiner's characterization that Kennedy discloses "displaying a second variable value bar below said stage axis on said graphical display device wherein said second variable value bar is non-filled". Column 6, lines 50-59 of Kennedy discusses parameters that deviate above or below the accepted baseline, NOT an axis. As above, the baseline represents a target value, not an axis. Moreover, whether or not a variable extends above or below this target value, depends on the value of the displayed variable. Column 6, lines 56-58 of Kennedy states: the stop of each bar graph is located at above or below the baseline depending upon actual deviation. Clearly, Kennedy does not provide an axis, i.e. a starting point, that both above and below which extend variable values, much less different variable values as in the claimed invention which includes three variables displayed at each stage location, one above the axis and two below the axis. Independent claims 1, 8 and 12, and therefore each of claims 1-12 and 14-20, are thus each distinguished from Kennedy.

Furthermore, Kennedy does display the target values for first and second variables unlike the claimed invention. In fact, the parameters of Kennedy are scaled so that the baseline 210, is the target value for each of the displayed parameters as indicated by the Examiner. Applicants again point out that the claimed invention recites that target values are NOT displayed for the first and second (or work-in-progress and production moves) variables. Kennedy teaches away from this feature because baseline 210 of Kennedy is displayed and graphically represents the target value for each variable as each of the parameters is scaled to enable the baseline 210 to

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function as such, as explained in col.6, lines 40-49. Kennedy displays all target values and therefore does not allow for the feature that first and second target values are not displayed and claims 1-12 and 14-20 are therefore further distinguished from Kennedy.

On page 4, second paragraph of the Office Action, the Examiner notes that Kennedy fails to disclose uploading a first variable value and a second variable value. The cited reference of Hsiung has apparently been relied upon for disclosing that which the Examiner interprets to be uploading a first and second variable values for a data base for a manufacturing stage. Hsiung does not teach or suggest displaying, at one stage, three variables extending in opposed directions from a stage axis. Hsiung therefore does not make up for the above-stated deficiencies of Kennedy and therefore the rejection of independent claims 1, 8 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Kennedy in view of Hsiung, should be withdrawn. Claims 2-7, 9-11 and 14-20 are dependent claims that depend from the independent claims discussed *infra*. Therefore, the rejection of these dependent claims under 35 U.S.C. §103(a) should also be withdrawn and therefore claims 1-12 and 14-20 are in allowable form.

II. Newly Added Claim 21

Independent claim 21 has been added to point out further distinguishing features of the invention and Applicants believe that claim 21 is distinguished from the references of record and is in allowable form.

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CONCLUSION

Applicants have made an earnest attempt to place this application in an allowable form. In view of the foregoing remarks, it is respectfully submitted that the pending claims are drawn to a novel subject matter, patentably distinguishable over the prior art of record, and that the application is therefore in condition for allowance, which action is respectfully requested of the Examiner.

Respectfully submitted,

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